

REMARKS

The amendment to the claims obviates the rejections under 35 U.S.C. § 112.

Independent Claim 2 has been amended to require that the negative electrode contain both vapor grown carbon fibers and a carbon material having a lattice spacing of from 0.37 to 0.38 nm.

Applicants have provided Examples and Comparative Examples in the specification as originally filed. The Examples of the specification provide a comparison of (i) a secondary power source having a negative electrode containing a carbon material having a lattice spacing from 0.37 to 0.38 nm and vapor grown carbon fibers, and (ii) a secondary power source having a negative electrode containing a carbon material having a lattice spacing of 0.337 nm and vapor grown fibers. The results tabulated in Table 1 of page 24 of the specification are summarized below.

Table A

	Initial capacity (mAh)	Change in capacity (%)	Lattice spacing of carbon material
Example 6	2.52	-5.8	$d_{002}=0.38$
Example 7	2.24	-24.8	$d_{002}=0.337$

Example 6 which contains a carbon material having a lattice spacing within the 0.37-0.38 nm lattice spacing of present independent Claim 2 has a higher initial capacity in mAh and a lower change in capacity in percent than Example 7 (which is a Comparative Example). The carbon material of Example 6 has a significantly greater lattice spacing than the carbon material of Example 7 (compare 0.38 with 0.337 nm). Example 6 demonstrates that a secondary power source having a negative electrode containing a carbon material having a

lattice spacing within the claimed range may have improved initial capacity and improved capacity retention (e.g., a lower change in capacity) than a secondary power source having a negative electrode containing a carbon material having a lattice spacing outside the 0.37-0.38 nm range of present independent Claim 2.

The Office rejected the claims of the Amendment filed on February 23, 2004 as obvious over Amatucci (U.S. 6,517,972) in view of Nishimura (U.S. 6,103,373). Applicants traverse the rejection on the grounds that Nishimura discloses that the electrode active material of the prior art composite capacitor is a graphite powder having a “plane spacing (d_{002}) of less than 0.34 nm.”

Applicants further traverse the rejection on the grounds of Applicants’ showing that a secondary power source having a negative electrode containing a carbon material having a lattice spacing within the 0.37-0.38 nm range recited in present independent Claim 2 may provide significantly improved initial capacity (in mAh) and change in capacity (in %) in comparison to a secondary power source having a negative electrode containing a carbon material having a lattice spacing of 0.337 nm (e.g., less than 0.34 nm).

Applicants submit the presently claimed invention is not obvious in view of Nishimura and Amatucci on the grounds that those of ordinary skill in the art may not have a reasonable expectation of success or a motivation to combine the prior art references based on at least one of the reference’s explicit disclosure that a carbon material having a lattice spacing outside the presently claimed range is preferred.

Applicants further submit that those of ordinary skill in the art may have no motivation to combine the references to arrive at the presently claimed invention because the presently claimed invention requires the presence of a carbon material that is not within the physical property characteristics of the carbon materials disclosed in the composite materials of the prior art reference (Nishimura).

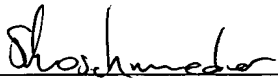
Applicants submit the presently claimed invention is therefore novel and not obvious
in view of the prior art references and respectfully request the withdrawal of the rejections.

Respectfully submitted,

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